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#### ABSTRACT

Noting the lack of self-concept research in nonwestern cultures and the need to determine if a western measure of self-image is embedded in the same network of constructs in another culture, this study examined the appropriateness of using the Self Image Questionnaire for Young Adolescents (SIQYA) with Nigerian students. Participating in the study were 162 Nigerian 11- to 13-year-olds who were Junior Secondary School students. Findings indicated that the internal consistency reliability coefficients for each of the 9 subscales were high for both boys (.89 to .90) and girls (.77 to .82), suggesting a high degree of internal consistency among the items. The test-retest reliability was assessed with 2 measures of the SIQYA obtained from the same samples 2 weeks apart and revealed a correlation of .54. Construct validity was ascertained by administering the SIQYA and a theoretically related test (Rosenberg Self-Esteem Inventory [SEI]) at the same testing session. With the exception of a few of the scales, the magnitude of the associations between the SEI and the SIQYA were sufficiently high. (Contains 33 references.) (KB)



# ASSESSING THE INTERNAL CONSISTENCY OF THE SELF-IMAGE QUESTIONNAIRE FOR YOUNG ADOLESCENTS (SIQYA): A NIGERIAN INVESTIGATION.

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#### **ABSTRACT**

This article examines the appropriateness for Nigerian students of the Self Image for Young Adolescents (SIQYA). The result of an administration of the SIQYA to162 Nigerian Junior Secondary School Students between the ages of 11 and 13 are reported. The internal consistency reliability coefficients obtained for each of the nine subscales for both boys and girls were high indicating a high degree of internal consistency among the items. The implications of the findings were discussed and suggestions were made for further studies.



# ASSESSING THE INTERNAL CONSISTENCY OF THE SELF-IMAGE QUESTIONNAIRE FOR YOUNG ADOLESCENTS (SIQYA): A NIGERIAN INVESTIGATION.

#### Background To The study.

A central question in the study of adolescence is whether this time of life is inherently tumultuous. The view that adolescence is a time of storm and stress dates back to Hall (1904) and it is supported it is supported by eminent theorists as Anna Freud (1958), Blos (1962), and Deutsch (1967). This view, which is based on psychoanalytic principles, has been confirmed mainly by studies of adolescents in treatment, who represent a small and atypical population of youth. By contrast, large-scale studies of adolescent population have concluded that turmoil is relatively uncommon (Douvan and Adelson, 1966; Offer and Offer, 1975).

While it is questionable that problems are inevitable in adolescence, it is clear that adolescence remains a potentially stressful period of life. Although the process that mark the passage from childhood to adolescence occur in different domains of functioning, they can be characterized as discontinuous, demanding, and often difficult for the young adolescent to master (Abramotwitz and Asp, 1983). The onset of puberty, transition to a new school structure that makes new demands, increased peer involvement and influence, and the beginning of movement toward some measure of independence from parents occur simultaneously, and they alter profoundly the relative simplicity and peace of childhood (Hamburg, 1974). All these changes require young adolescents to adapt in the way they view themselves. In the last two decades, there has been growing interest in the



awareness of the changes taking place during early adolescence. For most individuals, both males and females, early adolescence is the time during which their bodies undergo the transformation from child to virtually adult status and proportion. A wide variety of both primary and secondary sexual characteristics develop for the first time during these years. These changes in the body must also become incorporated in early adolescents' view of themselves.

Self-concept and self-image has been discussed in a wide variety of theoretical perspectives in the recent times. Major reviews by Hattie (1992) and Wylie (1989) have attributed much of the credit for the considerable progress that has been made in the measurement of self-concept to the lead provided by Shavelson, Habner and Stanton (1976). The term self concept and self-image have been used interchangeably to refer to a phenomenological organization of individual's experience and ideas about themselves in all aspects of their life (Petersen, 1981; Coombs, 1981). Self-image is not markedly different from self-esteem, but it provides a more detailed and specific assessment of how positively individuals view themselves in various domains of life (Rosemberg, 1965; Sherwood, 1965). Rosembrg (1979) defined self-image as the totality of the individual's thoughts and feelings having reference to the self as an object, thus we can speak about the various aspect of an individual's self-image for example, as student, family member, or friend or how self-image is manifested in psychological functioning such as impulse control, mental health adjustment etc.

Many psychologists have long regarded self-concept as a fundamental personality variable. Unfortunately, there are indications in literature pointing to the fact that although self-concept has been a popular area of research the quality of measuring



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instruments developed to study this variable 'had become something of an embarrassment to the field of personality psychology" (Wylie, 1974; Briggs and Cheek, 1986). A number of self-concept scale such as the Self Description Questionnaire (Marsh, 1988), About Myself Questionnaire (Song & Hattie, 1984), the Self Rating Scale (Fleming & Courtney, 1984), and Self-Image Questionnaire for Young Adolescent (Petersen, et al 1984) have been developed in recent years, they have generally been standardized on Anglophone Australian and North American samples.

In addition, most recently published measures of self concept tend to have "unspecified or inadequate psychometric characteristics" (Wylie, 1989), and the crosscultural validity of such instruments remains to be investigated. Their adoption for studies of self-concept in African cultures would clearly be inappropriate. The role of socio-cultural assumptions and values in knowledge about the self has been acknowledged in a wide range of studies. (Baumeister, 1987; Markus & Kitayama, 1991; Triandis, 1989); however cross-cultural and monocultural values in self-concept orientation remains a major concern of self-concept research (kagitcibagi, 1987); Schweder & Levine, 1984; Strauss & Goethals, 1991).

Third world psychologists have for years been questioning the appropriateness of western psychological concepts in cross-cultural settings (Enviquez, 1977). Bond and Taksing (1983) pointed out that there has been relatively little self-concept research in non-western cultures. They also observed that many earlier cross-cultural studies in the self-concept area merely employ an American developed test of self-concept on a non-western country, after translation if necessary. The test was then scored, the results compared to American norms, and a "conclusion" was then drawn about the relative level



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of self-esteem in each society. Cross-cultural psychologists have consistently pointed out the problems inherent in this type of research approach. It assumes what Hui and Triandis (1985) refer to as scalar equivalence-, which is that, the construct of interest is measured on the same metric in the different cultures. Such a level of equivalence is very hard to establish and involves first demonstrating conceptual, construct, operational, and item equivalence. However, for many research purposes all that needs to be demonstrated is that our instruments measure equivalent concepts and that the relationships between variables are comparable.

If it can be shown that a western measure of self-image such as the Self-Image for Young Adolescents (SIQYA) is embedded in the same network of constructs in another culture, then we can be fairly confident that the measure is conceptually, functionally, and operationally equivalent in both cultures, and we are also in a much stronger position to claim scalar equivalence (Hui & Triandis, 1985).

The specific aims of this research is are:

- To investigate the internal consistence reliabilities of the scales of the SIQYA for Nigerian adolescents.
- To ascertain the construct validity of the SIQYA using Nigerian adolescents.



#### **METHOD**

#### Subjects.

A total of 162 Junior Secondary School Students were randomly selected from two secondary schools within Ilorin Metropolis in Kwara state, Nigeria. Secondary school in Nigeria is a 6-year programme. The first three classes are referred to as Junior Secondary School (JSS1-3), while the last three years are referred to as Senior Secondary School (SSS1-3). Kwara state is considered to be one of the most heterogeneous states in Nigeria. Geographically it is situated in the transitional zone between southern rain forest and northern savannah regions of Nigeria. This position also represents the confluence of cultures of the Nigerian people. The age range of the subjects selected for the study was between 11-13 years.

#### Procedure

The purpose of this study is to investigate the internal consistence reliabilities of the scales of the Self-Image Questionnaire for Young Adolescents (SIQYA) for young Nigerian adolescents. The SIQYA (Petersen, Schulberg, Abramowitz, Offer& Jarcho, 1984) is an adaptation of the Offer Self-Image Questionnaire (OSIQ) (Offer et al, 1981). The instrument contains ninety-eight items. Response values ranged from one to six. Scale scores are calculated in the item metric, with items recoded so that a higher score across all items indicates more positive self-image. The SIQYA consists of nine scale: Impulse Control, Emotional Tone, Body-Image, Social Relations, Family Relations, Mastery of the External World, Vocational-educational Goals, Psychopathology, and Superior Adjustment.



The reliability of the SIQYA was examined in terms of the internal consistency and test-retest stability of the instrument. Test-retest reliability is typically assessed with two measures obtained two weeks apart. The Alpha Coefficient for each of the scales within the SIQYA was determined, thus establishing the degree of internal consistency among the items. The reliabilities of the scales were measured by Cronbach's (1951) coefficient alpha for inter-item consistency, which ordinarily provides a good minimum estimate of reliability (Lord and Novick, 1968).

The construct validity of the SIQYA was ascertained by demonstrating the criterion-related validity of the scale. This was done by comparing the SIQYA scale scores and total SIQYA score (mean of the scale score) with the Rosenberg Self-esteem Inventory (SEI; Rosenberg, 1965) a well validated, and accepted measure. The SEI, a 10-item questionnaire, provides a global measure of self-esteem, and has been found to be reliable and valid among young adolescents (Rosenberg, 1965). The Rosenberg SEI and the SIQYA were administered during the same testing session to all the respondents.

#### **RESULTS**

The Internal Consistency Reliability Coefficients obtained for the Nine Scales of the SIQYA are high indicating a high degree of internal consistency among the items. The Internal Consistency Reliability obtained for each of the scales for both boys and girls combined are shown on table one. The reliability coefficient for the nine scales for boys ranged from .89 to .90 while that of the girls ranged from .77 to .82. These reliabilities are well within the acceptable range for instruments of this nature. The result can be said to be in the same range with those of Petersen et al (1984). The test-retest



reliability was also assessed with two measures of the SIQYA obtained from the same samples two week apart. The result of the Pearson product-moment correlation between the two set of scores is .54.

The construct validity was ascertained by administering the SIQYA and a theoretically related test called the Rosenberg Self-Esteem Inventory (SEI) during the same testing session. Table two shows the correlations between SIQYA scales and Rosenberg SEI for both boys and girls. With the exception of a few of the scales the magnitude of the correlation can be said to be sufficiently high. It is reasonable to say that the associations between the SEI and the SIQYA among the Nigerian sample support the construct validity of the SIQYA.



Table 1: SIQYA scale description and Internal Consistency Reliability Coefficients

Reliability (Coefficients α)

(C) I	1 ~ i .:-			cliability (Coefficion	ents a)
SN	Scale (item	Numbers of	Boys	Girls N=63	Total Boys
-	example)	items	N=99	α	& Girls
		(direction)	α		$N=162, \alpha$
1	Impulse control (I am a calm person	8 (4+/-)	0.90	.81	.88
2	Emotional tone (most of the time I am happy)	11(3+/8-)	.89	.78	.87
3	Body Image (I am proud of my body)	11 (5+/5-)	.89	.78	.87
4	Mastery and coping (I feel I am able to make decision)	10 (5+/5-)	.89	.77	.86
5	Psychopathology (I am confused most of the time)	11-	.90	.82	.88
6.	Superior Adjustment ( I am a leader in school)	10 (9+/1-)	.90	.78	.87
7.	Peer Relationships (I find it extremely hard to make friends)	10 (4+/6-)	.89	.79	.86
8	Family Relationships (my parents are difficult to understand)	17 (7+/10-)	.89	.77	.86
9.	Vocational- Education goals (I enjoy learning new things)	10 (6+/4-)	.89	.77	.86



Table 2: Correlations between SIQYA scales and the Rosenberg SEI.

SN	SIQYA Scales	Boys (N=99)	Girls (N=63)
1	Impulse control	.37	.49
2	Emotional tone	.45	.66
3	Body Image	.41	.64
4	Mastery and Coping	.57	.61
5	Psychopathology	.44	.40
6	Superior Adjustment	.37	.60
7	Peer Relationship	.43	.63
8	Family Relationships	.60	.70
9	Vocational/educational goals	.50	.60
10	Total	.56	.73



#### **DISCUSSIONS**

This article presents data on an instrument (SIQYA) measuring aspects of self-image among young adolescents in Nigeria. The nine scales show good reliability assessed in terms of internal consistency. This research provides support for the continued use of SIQYA with Nigerian young adolescents; the obtained item-scale correlations and internal consistency reliabilities of the subscales and total scale were very encouraging. The results obtained in this study are generally consistent with those obtained in other research (Petersen et al, 1984). The trend among many researchers today is to attempt to answer the question of cross-cultural equivalence by examining the internal structure of the construct. The rationale is that if a construct is the same across cultures, it should have the same components (or internal structures) and the same relations among components across cultures.

In general, the results of this study support the usefulness of a multiscale instrument that provides information on the several important components of the self-image during early adolescence among Nigerian sample. Of course, considerable further research will be required before the extent of the validity of the Self Image Questionnaire for Young Adolescents (SIQYA) is determined. There is need to provide more factor analytic evidence which will provide within-construct validity for the instrument among



non-western samples. Naturally there is need for some caution in drawing conclusions about cross-cultural differences based on a limited sample such as the one employed in this study. However, the fact that the findings of this study revealed that the nine scales of the SIQYA show very good reliability when assessed in terms of internal consistency is a bold step towards determining the validity of SIQYA among non-western samples. Thus helping to solve the problems associated with developing culturally and ethnically unbiased tests. It is suggested that future studies should employ a more detailed analysis such as factor analysis to probe the within-construct validity of the SIQYA and also make use of probability samples to determine whether the results of this study are replicable and generalizable to other African cultures.



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